2

4

6

8

2

2

4

## WHAT IS CLAIMED IS:

1. A method of receiving a wireless transmission comprising the steps of: inverting the polarity of an incoming waveform on every one half clock cycle of a conversion clock to produce a commutated waveform; and

converting said commutated waveform to a series of representative digital values using a delta-sigma modulator clocked by said conversion clock.

2. The method of claim 1, wherein said incoming waveform is centered about a radio frequency and carries a modulated signal, wherein said conversion clock has a frequency approximately equal to said radio frequency, and said series of representative digital values are representative of said modulated signal.

3. The method of claim 2, further comprising the step of digitally filtering said series of representative digital values according to programmable filter characteristics wherein said programmable filter characteristics are selected based upon a type of modulation of said modulated signal.

the steps of:

The method of claim 1, wherein said step of inverting further comprises

producing an inverted signal representation of said incoming waveform; producing an non-inverted signal representation of said incoming waveform; coupling said inverted signal representation to a first input port of a switch; coupling said non-inverted signal representation to a second input port of said switch; and

coupling said conversion clock to a control port of said switch.

5. The method of claim 1, wherein said incoming waveform is received over an antenna and wherein an amplitude of said incoming waveform is in fixed proportion to an amplitude of a signal strength received by said antenna.

24

4

6

8

2

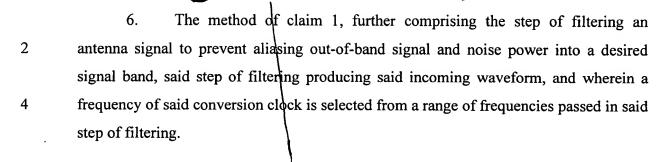
4

6

8

2

4



7. A receiver comprising:

a continuous time commutator configured to be coupled to a digital conversion clock and configured to invert a polarity of an incoming signal applied to an input port on every half clock cycle of said digital conversion clock and to produce a commutated signal at an output port; and

a delta-sigma modulator having a clock input port coupled to said digital conversion clock, having a signal input port coupled to said output port of said continuous time commutator and having an output port configured to produce a series of digital values representative of a modulation waveform carried by said incoming signal.

8. The receiver of Claim 7, wherein said continuous time commutator comprises:

a complementary amplifier configured to receive said incoming signal and to produce an inverted version of said incoming signal at an inverted output port and to produce a non-inverted version of said incoming signal at a non-inverted output port; and

a switch having a first input port coupled to said inverted output port, having a second input port coupled to said non-inverted output port and having a control port coupled to said digital conversion clock.

9. The receiver of Claim 7, wherein said delta-sigma modulator comprises:

a loop amplifier having a first input port coupled to said output port of said continuous time modulator, having a second input, and having an output port;

a continuous time loop filter coupled to said output port of said loop amplifier and having an output port;

